Claims 1-3, 5-10, 15-23, 25-34, 35 and 44-48 dependent thereon, and 37 and 41-43 dependent thereon, are at issue.

The applicant and his attorney appreciate the courtesy extended by the examiner during the telephonic interview on July 21. During that interview, the content of the cited art, particularly Hesler et al.('999), and the scope of the claims were discussed. It was emphasized by Mr. Nilssen that this patent fails to disclose a circuit utilizing two current transformers, as specified in claim 1. However, based on the dictionary definition of a current transformer recited in the last Office Action, the examiner persisted in his position that the windings 12 and 18 of Figs. 1 and 2 of Hesler et al. constitute a current transformer since winding 12 is in series with transistor 20.

There was other discussion with regard to claim 15, claim 22 and related claims. It was pointed out to the examiner, and Examiner Grimm agreed, that the waveforms of Fig. 1a were inaccurate and misdescriptive of the Hesler et al. circuit. With regard to claims 2, 6 and other claims, which specify a low resistance path for connecting the output windings to the bases of the two transistors of the inverter, it was emphasized by Mr. Nilssen that a 2 ohm resistor shown in Figs. 5 and 6 of Hesler et al. ('680) does not constitute the low resistance path referred to in the claims. Such a resistor at a current of 10 amperes will dissipate 200 watts of power.

Based on the above discussion, the examiner generally indicated that although there appeared to be patentable subject matter, some amendment to the claims would be required.

Claim 1 has been amended and now specifies with respect to each of the current transformers that the transformer has a pair of primary windings respectively connected with the pair of switching transistors and that the feedback signal is a current

substantially proportional to the sum of the current conducted through said pair of transistors.

It is respectively submitted that this amendment clearly renders claim 1 allowable over the cited references, particularly Hesler et al. (999). Winding 12 of Hesler et al. is the primary winding of a power transformer and cannot correspond to either of the first and second current transformers. In addition, it is clear that the transformer windings 14 and 16 of the only current transformer shown in Hesler et al. are fed with the collector current from only one of the transistors 20 and 21. Thus, the output is not substantially proportional to the sum of the current conducted through both transistors, as now specified in claim 1.

Further, with regard to claim 1 and related claims which call for a pair of current transformers, it is still applicant's position that the transformer formed by windings 12 and 18 in Hesler et al., although it may technically meet the dictionary definition, does not constitute a current transformer. The dictionary definition is indefinite. The term current transformer, as used in the application, is intended by applicant to mean a transformer with an input impedance that can be considered very small in comparison to the impedance of the source of current applied to its input and which also provides an output current that is substantially proportional to its input current. With regard to Hesler et al., it is clear that two current transformers are not shown; for the current from winding 18, after the magnetic branch associated with winding 14 and 16 has been saturated, is not substantially proportional to the current through primary winding 12. Rather, the current through winding

18 is related to the voltage across winding 12 which, of course, implied that it is related to the voltage of the power supply 10. Reconsideration of the rejection of claims 1 and claims 2, 3 and 5-10 dependent thereon is, therefore, respectively solicited.

Claims 2, 6 and 9 have been amended and reconsideration of the rejection of these claims is requested for additional reasons. Claims 2 and 6 now specify that the resistance of the low resistance path is no greater than the effective resistance of the base-emitter junctions of the transistor which it interconnects for a given base drive. What is desired is minimal resistance. Clearly, the claim now distinguishes from the Hesler et al. circuit in which a 2 ohm resistor has been intentionally placed in the path between the bases of the two switching transistors. With regard to claim 9, it is now specified that the capacitor is connected across the power transformer primary winding through the primary winding of the first and second current transformers and directly connected between the collector element of the switching transistors to restrain the rate of rise of collector voltage after transistor turn-off. Clearly, capacitor 34 in Fig. 1 of Hesler et al. ('999) is not connected in such a fashion and does nothing to minimize the rate of rise of the collector voltage. This inclusion of any amount of resistance in series with capacitor 34 is detrimental with respect to both power dissipation and protection of the transistors against voltage spikes.

Claim 15 and claims 16-23 dependent thereon and claim 25 and claims 26-34 dependent thereon are believed allowable for the reasons set forth in the remarks to Amendment B. In addition, it has now been conceded by the examiner that the waveforms of Fig. 1a of Hesler et al. ('999), relied upon as the basis of rejecting those claims, are inaccurate and misdescriptive of the Hesler et al. circuits when the collector-emitter voltages thereof

are significantly greater than the saturation voltages. Likewise, with regard to claim 25, reference to the waveforms of Hesler et al. ('999) does not reveal the application of a control signal effective to turn on either switching transistor only after its collector voltage drops substantially to its lowest level prior to the control signal being applied. Reconsideration of the rejection of these claims and allowance thereof are, therefore, respectfully solicited.

Reconsideration and allowance of claim 35 is respectfully requested. Claim 35 emphasizes that the current transformers, unlike the transformers of Hesler et al., are formed on separate cores. No support has been provided by the examiner for his position that it would be obvious that the current transformers and the output transformers of Hesler et al., Fig. 1, could be formed on separate cores. First, as it was previously noted, Hesler et al. fails to disclose a pair of control current transformers in any type of configuration. Applicant has attempted to reconfigure Hesler's circuit as disclosed in Fig. 1 of the '999 patent through use of a combination of individual transformers. The most nearly equivalent arrangement that can be identified by applicant is shown in basic form in the schematic sketch of Fig. A, attached hereto. Unfortunately, in this equivalent circuit, there is no way to provide the required resetting, or re-magnetization, of the current transformers after they have been initially set, or magnetized, by the collector currents. Accordingly, this nearest equivalent circuit would not even be able to oscillate. It is applicant's strong belief that there is no way to make a circuit based on using individual feedback transformers which will operate substantially in the same manner as the Hesler et al. circuit with its multi-apertured single transformer. Unless such an equivalent circuit can be derived, there is no valid basis for rejecting claim 35. Claims 44-48 dependent on

claim 35 are believed allowable for these same reasons. Either disclosure of such an equivalent circuit or withdrawal of the rejection is, therefore, solicited.

Claim 37 was previously amended in Amendment B to specify, inter alia, means including a diode for preventing the second signal from being applied to the non-conductive one of the switching transistor. Reasons are set forth in the remarks of Amendment B as to why this claim is believed allowable. The latest Office Action has not in any way responded to these reasons for allowability. Claim 37 is, therefore, still believed allowable for these reasons and withdrawal of the rejection thereof is, therefore, requested.

Reconsideration and allowance of all claims at issue, claims 1-3, 5-10, 15-23, 25-35, 37-41 and 44-48, are, therefore, respectfully solicited.

Respectfully submitted,

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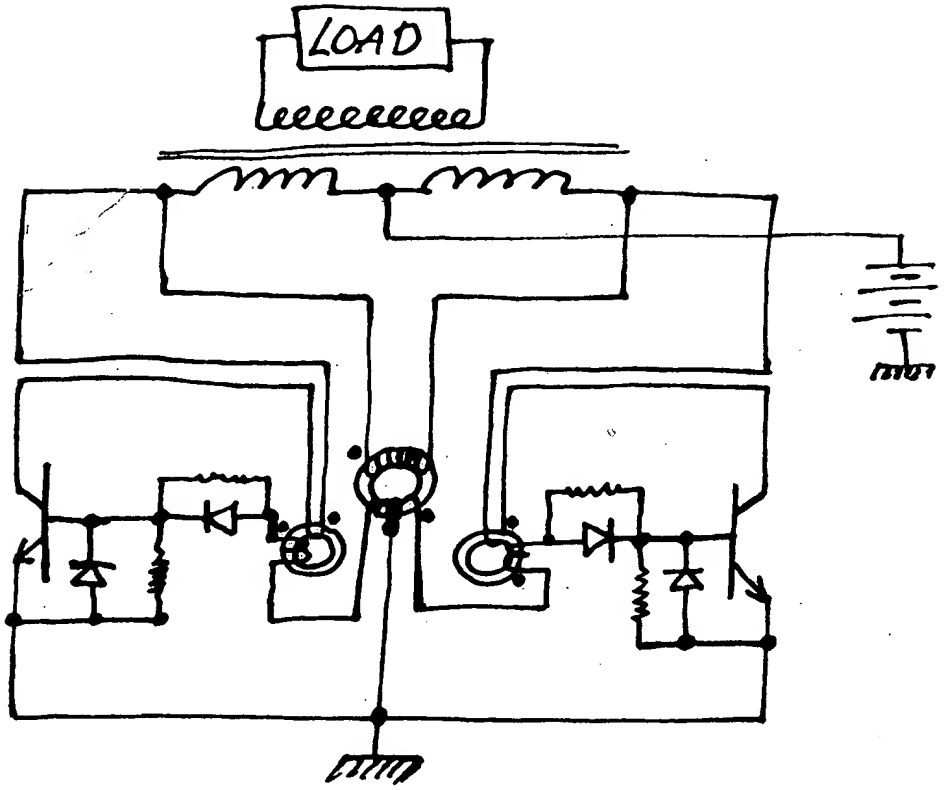

Fig. A